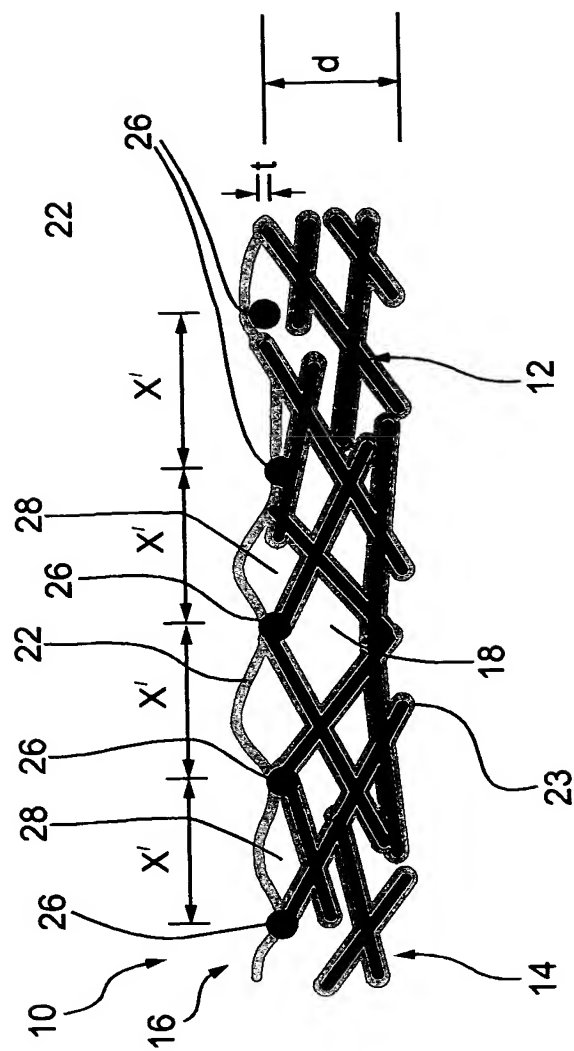


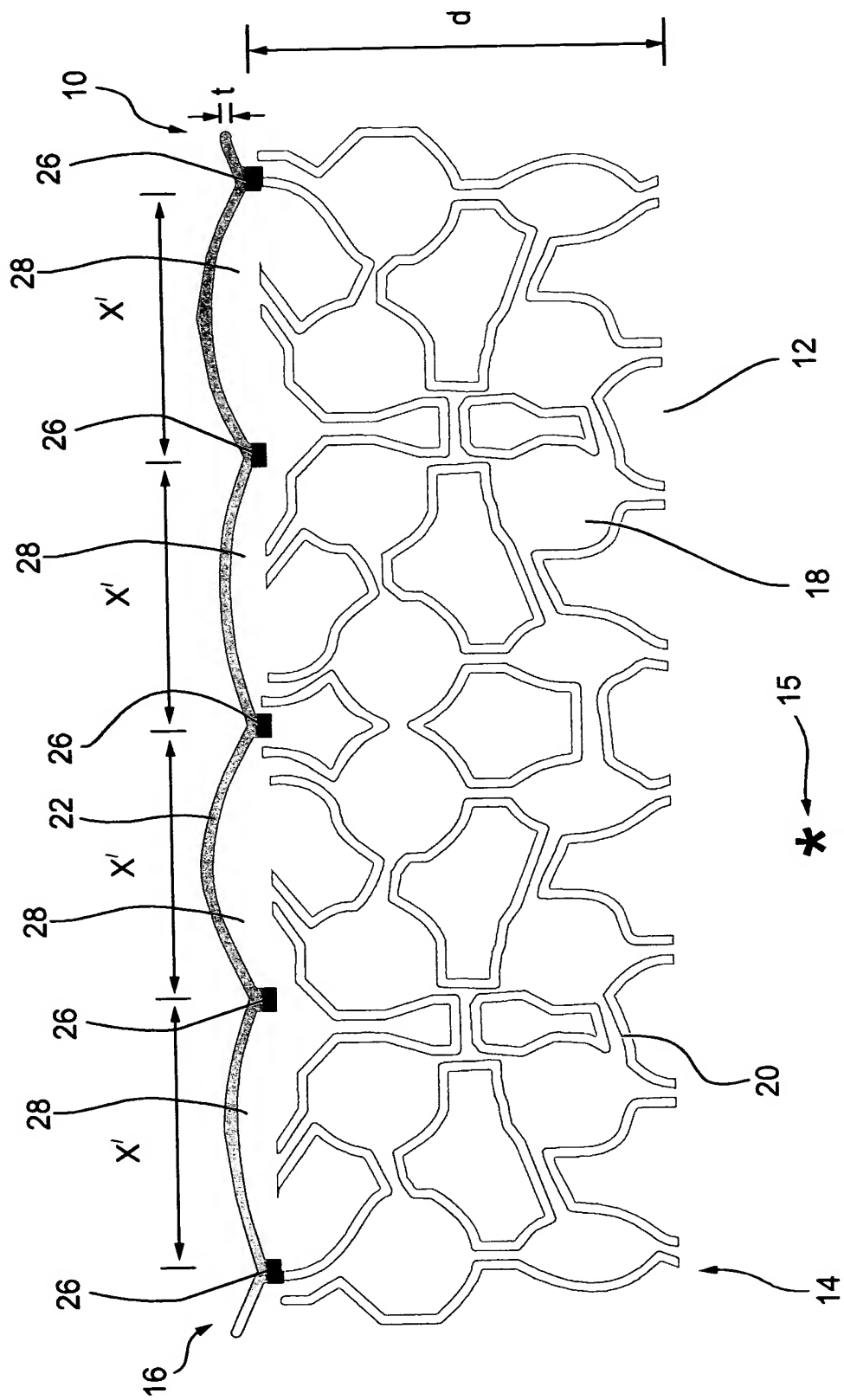
* 15

Fig. 1a



15
→ *

Fig. 1b



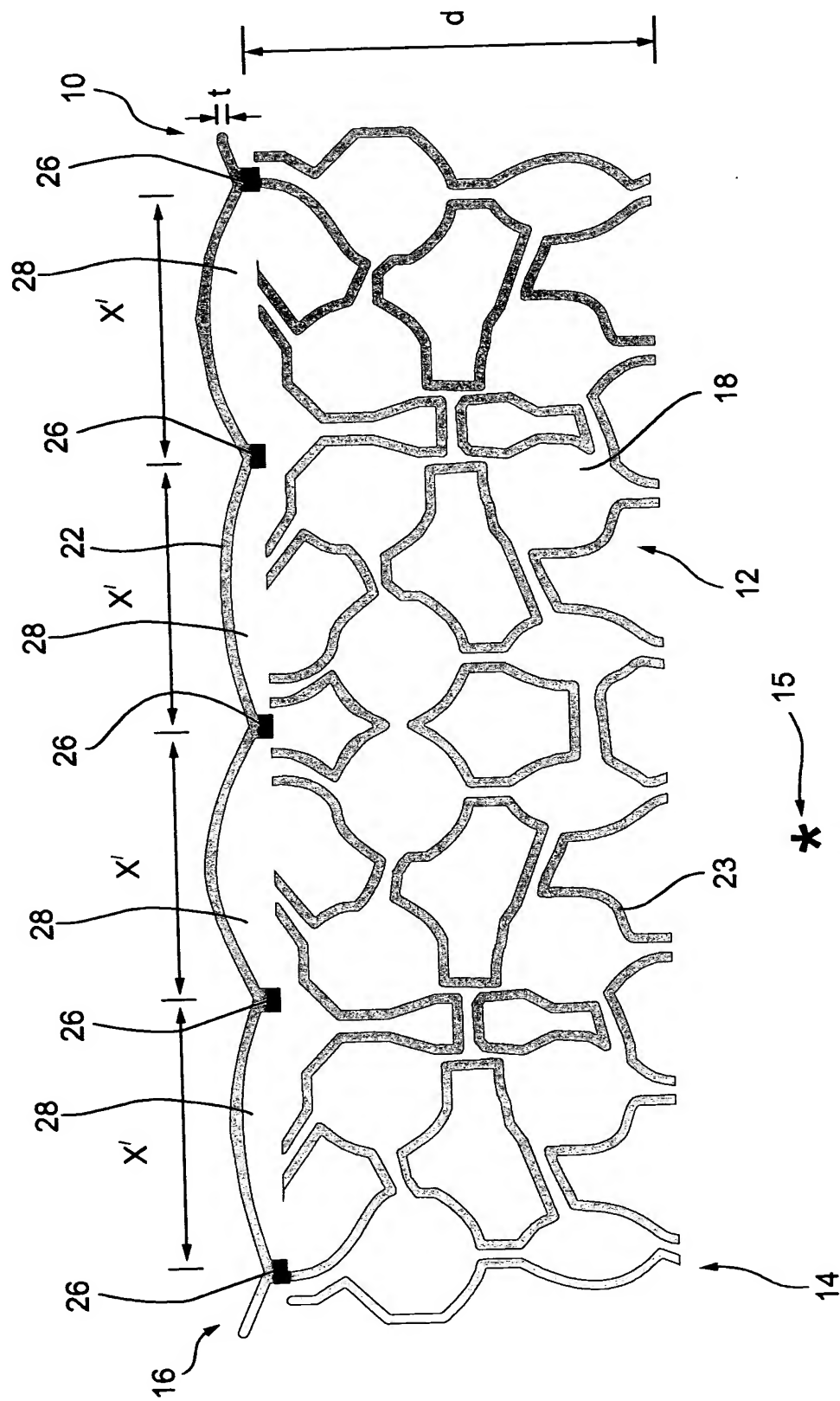


Fig. 1d

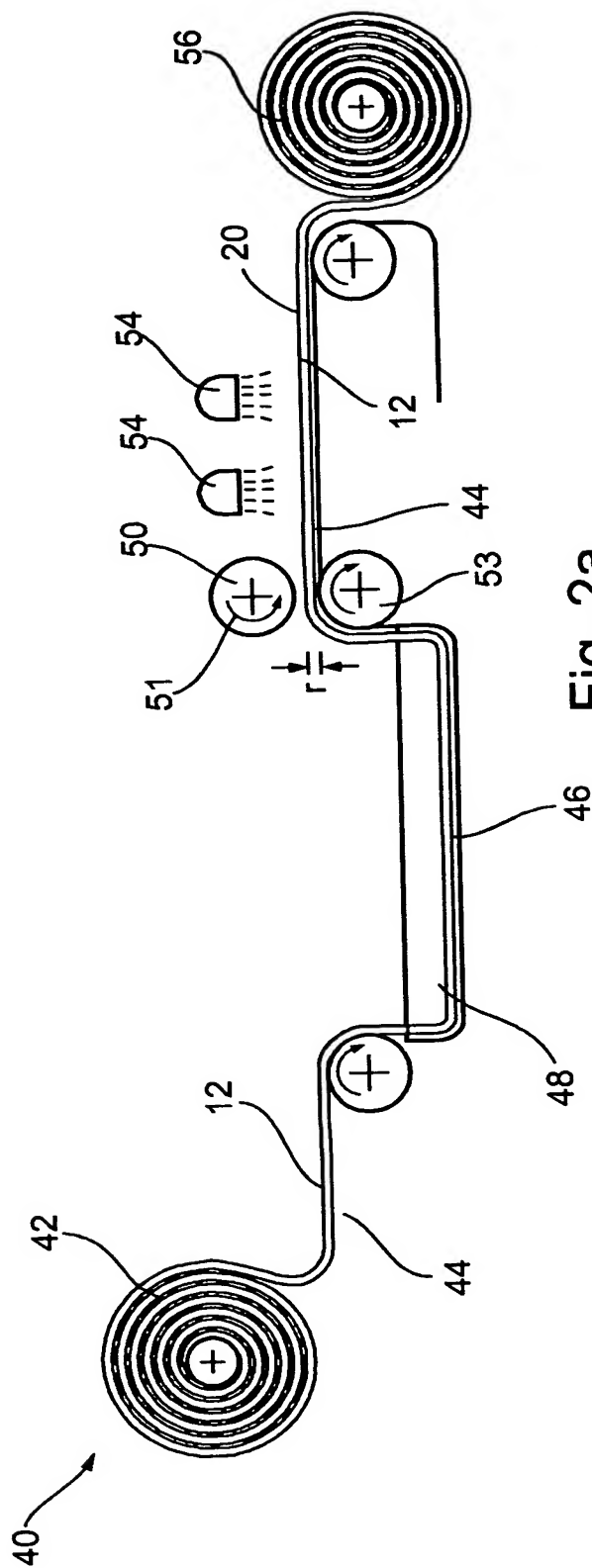


Fig. 2a

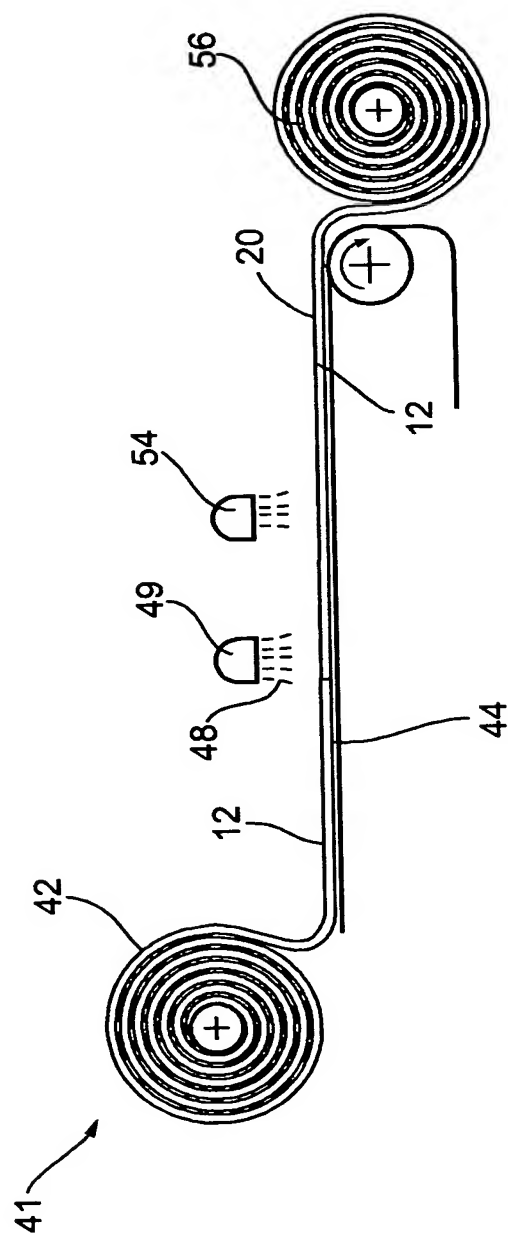


Fig. 2b

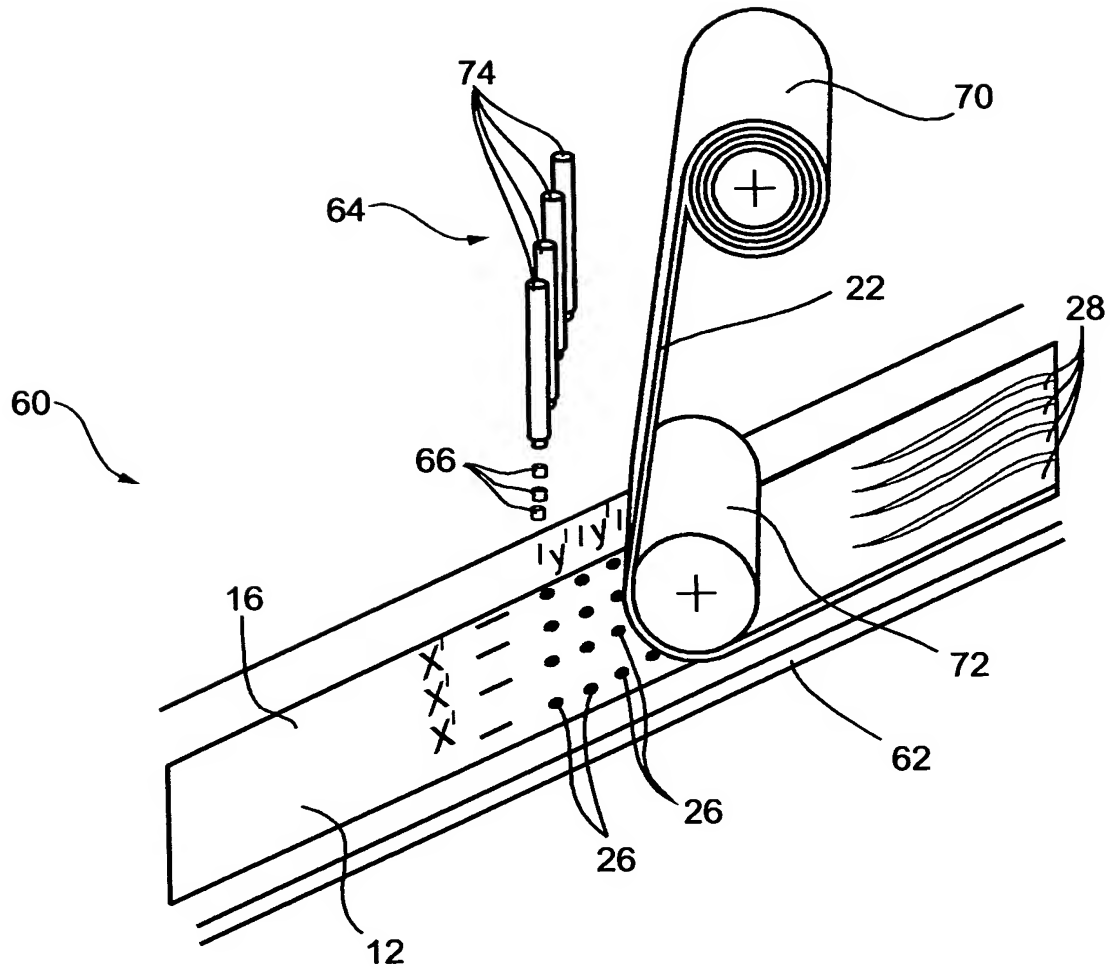
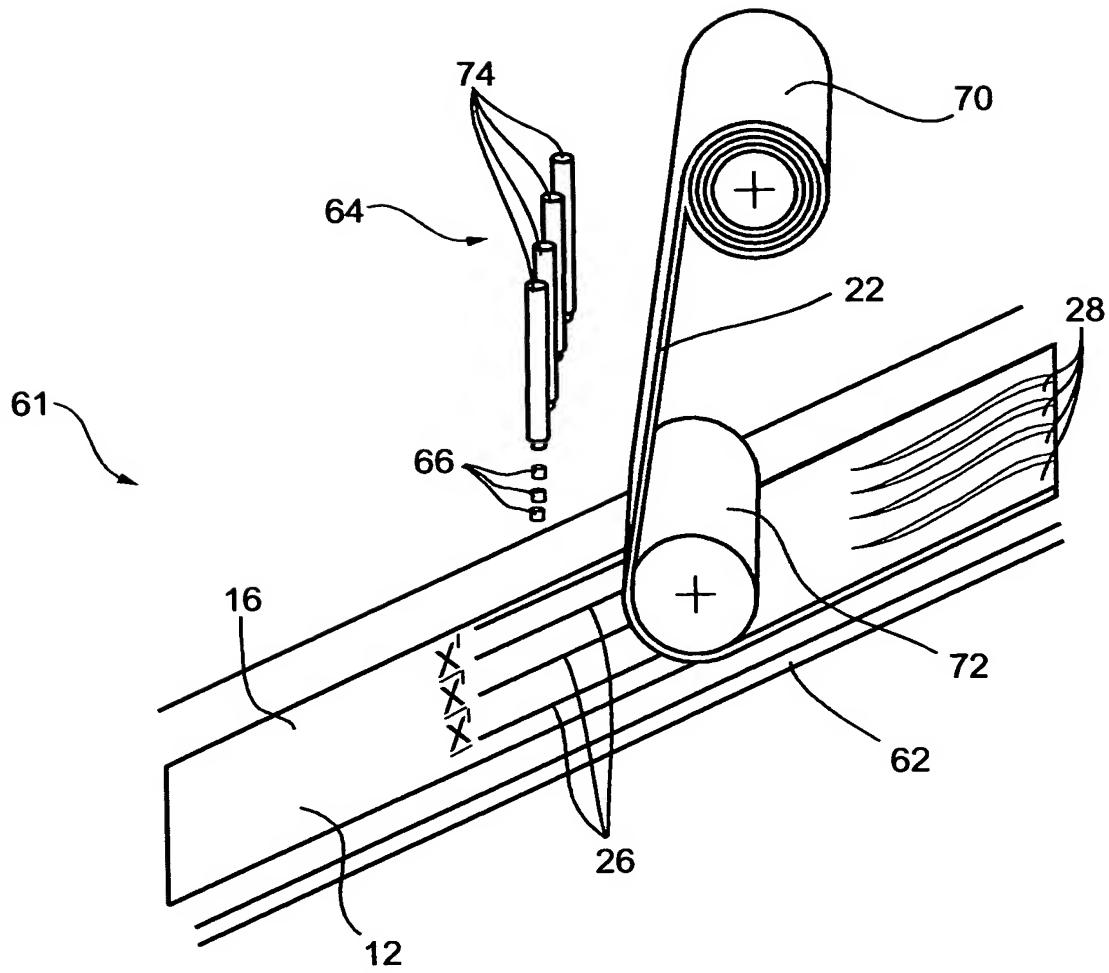


Fig. 3a



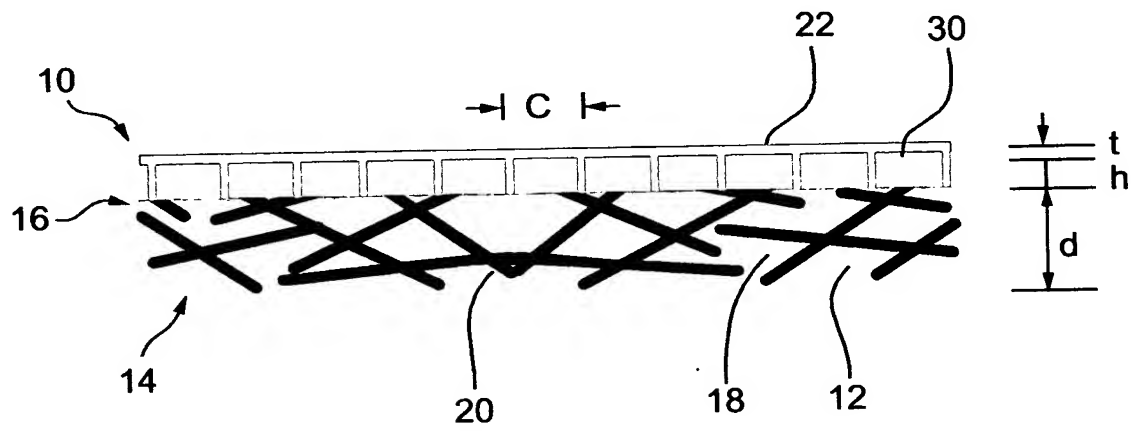


Fig. 4

1.6 mm nonwoven polyester, coated with a water glass film

Sample	Weight Gain	Frequency, Hz				NRC
		250	500	1000	2000	
5A-1	-	0.36	0.21	0.30	0.33	0.30
5A-2	1.8	0.40	0.43	0.27	0.43	0.38
5A-3	3.0	0.54	0.39	0.31	0.53	0.48
5A-4	4.0	0.70	0.37	0.44	0.72	0.56
5A-5	5.2	0.80	0.37	0.47	0.72	0.59
5A-6	6.1	0.89	0.39	0.38	0.58	0.56
5A-7	8.1	0.81	0.42	0.34	0.14	0.43

Fig. 5a

1.6 mm nonwoven polyester, coated with a water glass film,
with a polyethylene membrane

Sample	Weight Gain	Frequency, Hz				NRC
		250	500	1000	2000	
5B-1	-	0.74	0.28	0.93	0.81	0.69
5B-2	1.8	0.83	0.57	0.93	0.96	0.82
5B-3	3.0	0.99	0.34	0.99	0.99	0.83
5B-4	4.0	0.98	0.54	0.90	0.85	0.82
5B-5	5.2	0.99	0.55	0.78	0.77	0.77
5B-6	6.1	0.99	0.33	0.93	0.64	0.72
5B-7	8.1	0.99	0.41	0.29	0.16	0.46

Fig. 5b

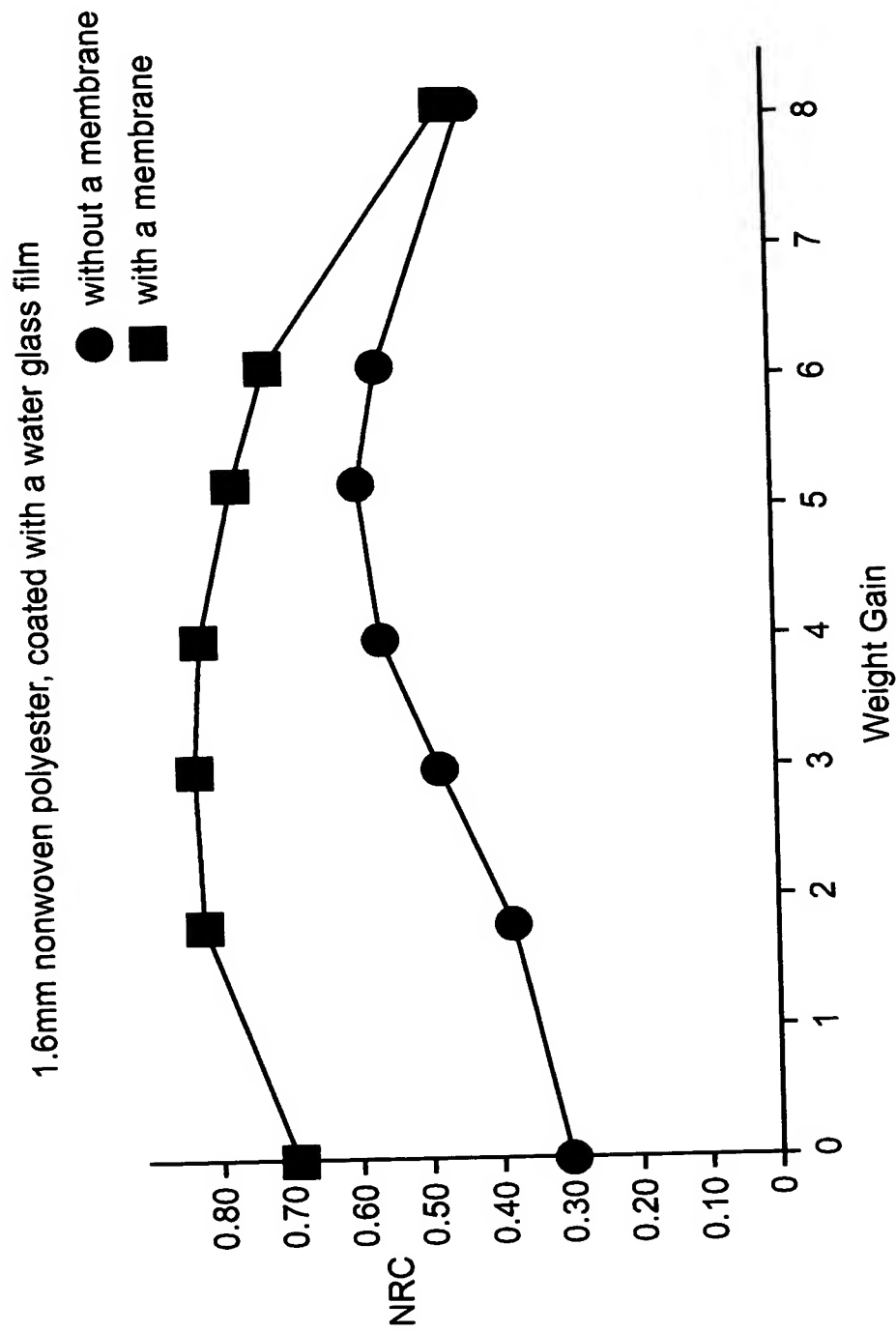


Fig. 6

1.6 mm nonwoven polyester, coated with a water glass and alumina film

Sample	Weight Gain	Frequency, Hz				NRC
		250	500	1000	2000	
6A-1	-	0.36	0.21	0.33	0.33	0.30
6A-2	3.3	0.64	0.38	0.36	0.66	0.51
6A-3	3.7	0.70	0.37	0.43	0.72	0.56
6A-4	4.1	0.77	0.35	0.46	0.78	0.59
6A-5	4.3	0.82	0.35	0.49	0.79	0.61
6A-6	4.9	0.88	0.32	0.58	0.86	0.66
6A-7	5.3	0.91	0.33	0.59	0.90	0.68
6A-8	5.7	0.99	0.33	0.64	0.86	0.71
6A-9	6.1	0.99	0.28	0.65	0.83	0.69

Fig. 7a

1.6 mm nonwoven polyester, coated with a water glass and alumina film with a polyethylene membrane

Sample	Weight Gain	Frequency, Hz				NRC
		250	500	1000	2000	
6B-1	-	0.74	0.28	0.93	0.81	0.69
6B-2	3.3	0.99	0.47	0.84	0.97	0.82
6B-3	3.7	0.93	0.44	0.99	0.99	0.84
6B-4	4.1	0.98	0.49	0.91	0.99	0.84
6B-5	4.3	0.99	0.48	0.89	0.94	0.83
6B-6	4.9	0.99	0.50	0.82	0.91	0.81
6B-7	5.3	0.99	0.43	0.84	0.90	0.79
6B-8	5.7	0.92	0.32	0.80	0.74	0.70
6B-9	6.1	0.38	0.41	0.49	0.71	0.50

Fig. 7b

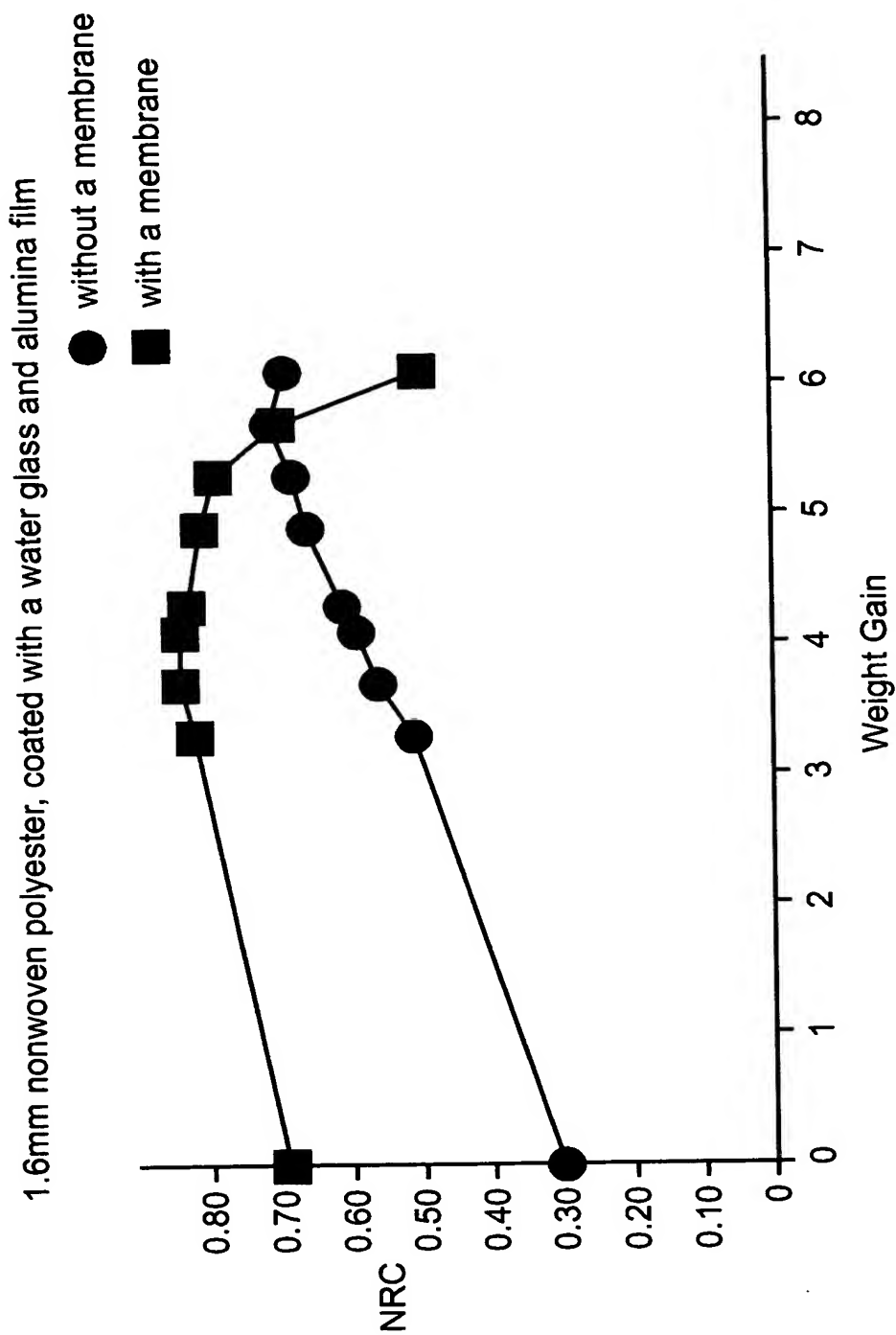


Fig. 8

4 mm foam, coated with a water-glass and alumina film

Sample	Weight Gain	Frequency, Hz				NRC
		250	500	1000	2000	
8A-1	2.3	0.36	0.42	0.27	0.38	0.36
8A-2	5.2	0.34	0.42	0.28	0.38	0.36
8A-3	8.2	0.37	0.43	0.24	0.43	0.37

Fig. 9a

4 mm foam, coated with a water glass and alumina film
with a polyethylene membrane

Sample	Weight Gain	Frequency, Hz				NRC
		250	500	1000	2000	
8B-1	2.3	0.99	0.32	0.47	0.61	0.60
8B-2	5.2	0.88	0.52	0.75	0.69	0.71
8B-3	8.2	0.99	0.57	0.82	0.76	0.79
8B-4	9.5	0.99	0.33	0.60	0.62	0.64
8B-5	9.8	0.99	0.30	0.43	0.55	0.57

Fig. 9b

4 mm foam coated with a water glass and alumina film

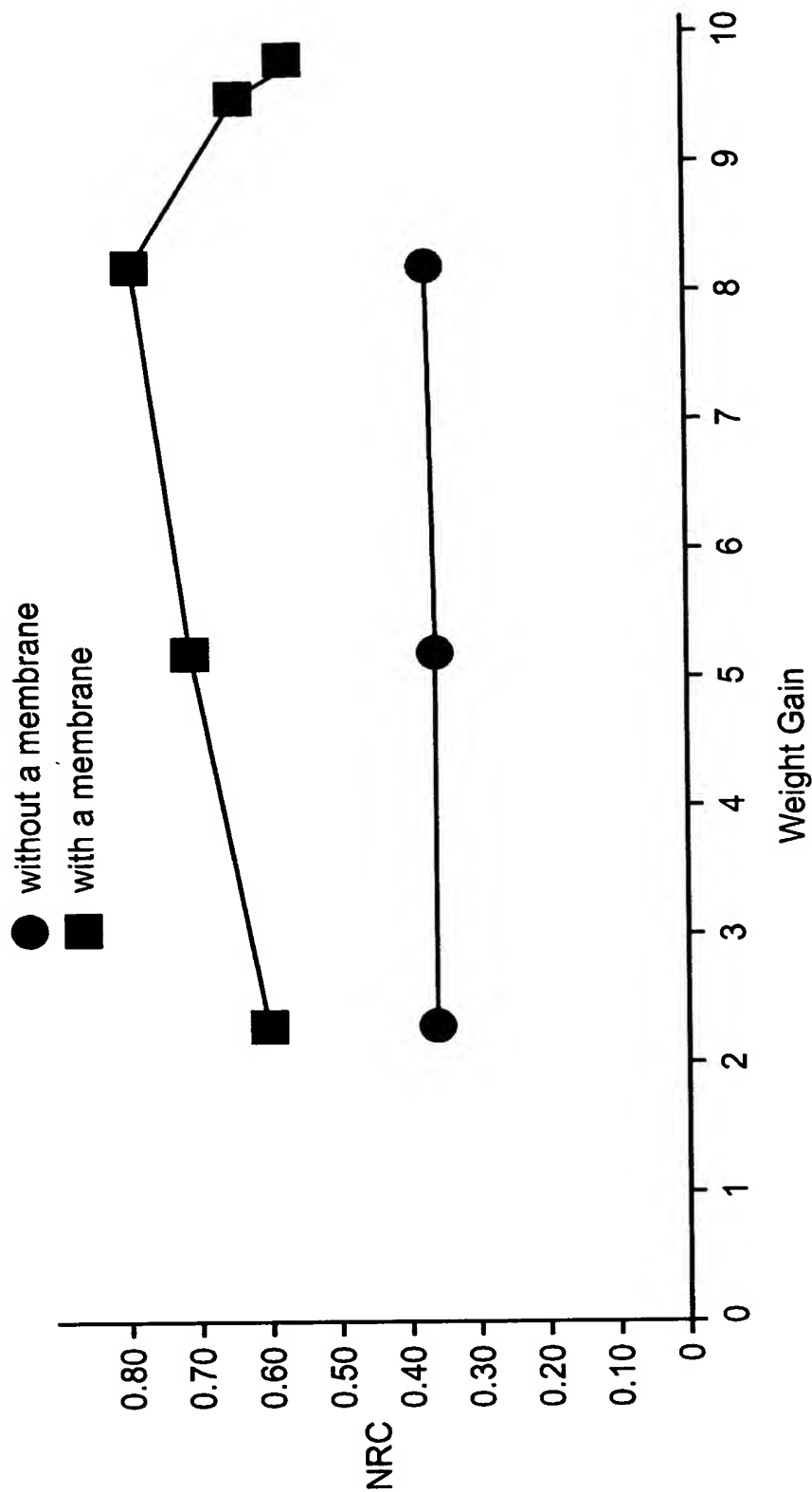


Fig. 10

1.6 mm nonwoven polyester, coated with a water-glass and alumina film to a weight-gain of 3.70, with a polyethylene facing, bonded at varying distances

Sample	Distance between Bonding Points	Frequency, Hz				NRC
		250	500	1000	2000	
7A-2	8	0.95	0.31	0.52	0.72	0.63
7A-3	4	0.99	0.30	0.60	0.81	0.68
7A-4	1.5	0.93	0.44	0.99	0.98	0.84

Fig. 11a

1.6 mm nonwoven polyester, coated with a water-glass and alumina film to a weight-gain of 5.30, with a polyethylene facing, bonded at varying distances

Sample	Distance between Bonding Points	Frequency, Hz				NRC
		250	500	1000	2000	
7B-2	1.5	0.99	0.43	0.84	0.90	0.79
7B-3	3	0.99	0.35	0.77	0.81	0.73

Fig. 11b

1.6mm nonwoven polyester, coated with a water glass and alumina film

● Weight gain factor of 3.7

▲ Weight gain factor of 5.3

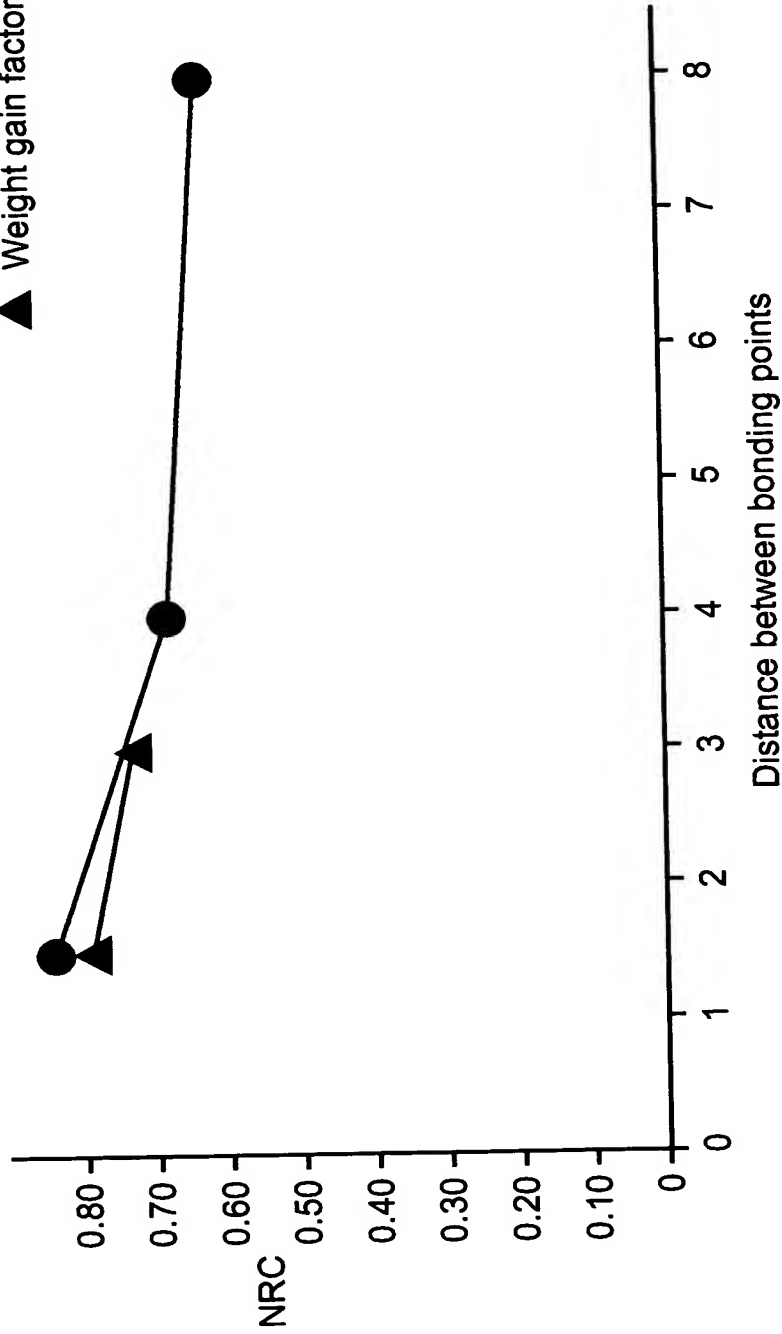


Fig. 12

1.6 mm nonwoven polyester, coated with a water-glass and alumina film attached to a honeycomb

Sample	Weight Gain	Frequency, Hz				NRC
		250	500	1000	2000	
9A-1	-	0.36	0.21	0.30	0.33	0.30
9A-2	3.7	0.70	0.37	0.43	0.72	0.56
9A-3	4.9	0.88	0.32	0.58	0.86	0.66

Fig. 13a

1.6 mm nonwoven polyester, coated with a water-glass and alumina film attached to a honeycomb with a polyethylene membrane

Sample	Weight Gain	Frequency, Hz				NRC
		250	500	1000	2000	
9B-1	-	0.99	0.32	0.47	0.61	0.60
9B-2	3.7	0.99	0.29	0.60	0.86	0.68
9B-3	4.9	0.95	0.25	0.61	0.80	0.65

Fig. 13b

1.6mm nonwoven polyester, coated with a water glass and alumina film
attached to a honeycomb

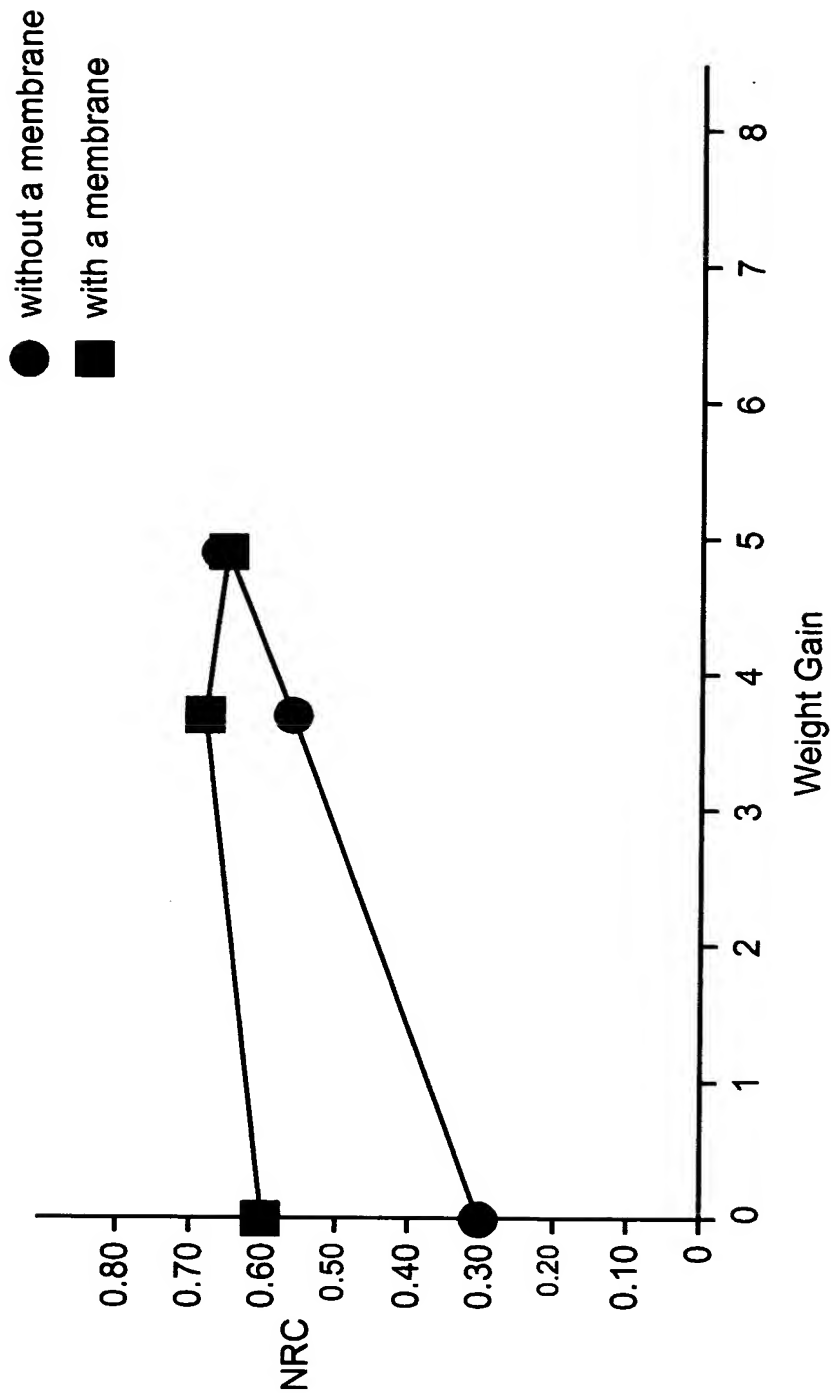


Fig. 14